

EXTRUDED BIPOLAR PLATES

ABSTRACT OF THE DISCLOSURE

An extruded bipolar plate for a fuel cell. The bipolar plate is fabricated by an extrusion process so that the extruder die forms linear channels in the extrusion for the flow channels in the plate. A variety of different shapes can be provided for the flow channels. In one design, the flow channels for the cooling fluid extend through the center of the bipolar plates, and flow channels for the anode and cathode fluids are provided on the outside of the bipolar plate. Further, the sides of the bipolar plate can be formed with a recess to receive end caps to secure the plates together. In addition, the end cap can include flow channels to control the flow of the fluids to the plates when the fuel cell stack is assembled.